

**In the Claims:**

Please amend claim 5 and add new claim 14 as set forth below in the "Listing of Claims".

**LISTING OF CLAIMS**

Claim 1 (Original): A method of plasma-etching an organic material film formed on a substrate with an inorganic material film used as a mask, by means of a parallel plate type plasma-etching apparatus; wherein the organic material film is plasma-etched with: a high-frequency power of a frequency of 40 MHz or above for generating plasma; and a process gas including an ionization accelerating gas that is ionized from a ground state or metastable state with an ionization energy of 10 eV or below and has a maximum ionization cross-section of  $2 \times 10^{-16} \text{ cm}^2$  or above, and a molecular gas.

Claim 2 (Original): The method according to claim 1, wherein a plasma-etching apparatus is used, the apparatus including: a process vessel into which the process gas is supplied; and parallel plate electrodes disposed in the process vessel, the electrodes being constituted by a support electrode on which the substrate is supported, and a counter electrode that is opposed to the support electrode; and the high-frequency power for generating the plasma is applied to the support electrode.

Claim 3 (Original): The method according to claim 2, wherein a high-frequency power of a frequency of 500 kHz to 27 MHz for drawing ions is further applied to the support electrode, such that an absolute value of the self-bias voltage of the support electrode is 500 V or below.

Claim 4 (Original): The method according to claim 1, wherein a plasma-etching apparatus is used, the apparatus including: a process vessel into which the process gas is supplied; and parallel plate electrodes disposed in the process vessel, the electrodes being constituted by a support electrode on which the substrate is supported, and a counter electrode that is opposed to the support electrode; and the high-frequency power for generating the plasma

is applied to the counter electrode; and a high-frequency power of a frequency of 500 kHz to 27 MHz for drawing ions is applied to the support electrode, such that an absolute value of the self-bias voltage of the support electrode is 500 V or below.

Claim 5 (Currently amended): The method according to claim 3, wherein the process gas includes Ar as the ionization accelerating ~~gases~~ gas, and N<sub>2</sub> and H<sub>2</sub> as the molecular gas.

Claim 6 (Original): The method according to claim 3, wherein the process gas includes Ar as the ionization accelerating gas and NH<sub>3</sub> as the molecular gas.

Claim 7 (Original): The method according to claim 3, wherein a frequency of the high-frequency power for generating the plasma is 100 MHz.

Claim 8 (Original): The method according to claim 3, wherein a distance between the support electrode and the counter electrode in the parallel plate electrodes is 40 mm or below.

Claim 9 (Withdrawn): An apparatus for plasma-etching an organic material film formed on a substrate with an inorganic material film used as a mask, comprising: a process vessel that contains the substrate; parallel plate electrodes disposed in the process vessel, the electrodes being constituted by a support electrode on which the substrate is supported, and a counter electrode that is opposed to the support electrode; a process gas supply system that supplies a process gas into the process vessel; an evacuating system that evacuates an atmosphere of the process vessel; and a first high-frequency power source that supplies a high-frequency power for generating plasma to the support electrode; wherein the first high-frequency power source supplies a high-frequency power of a frequency of 40 MHz or above; and the process gas supply system supplies a process gas including an ionization accelerating gas that is ionized from a ground state or metastable state with an ionization energy of 10 eV or below and has a maximum ionization cross-section of  $2 \times 10^{-16} \text{ cm}^2$  or above, and a molecular gas.

Claim 10 (Withdrawn): The apparatus according to claim 9, further comprising: a second high-frequency power source that supplies a high-frequency power of a frequency of 500 kHz to 27 MHz for drawing ions to the support electrode, such that an absolute value of the self-bias voltage of the support electrode is 500 V or below.

Claim 11 (Withdrawn): An apparatus for plasma-etching an organic material film formed on a substrate with an inorganic material film used as a mask, comprising: a process vessel that contains the substrate; parallel plate electrodes disposed in the process vessel, the electrodes being constituted by a support electrode on which the substrate is supported, and a counter electrode that is opposed to the support electrode; a process gas supply system that supplies a process gas into the process vessel; an evacuating system that evacuates an atmosphere of the process vessel; a first high-frequency power source that supplies a high-frequency power for generating plasma to the counter electrode; and a second high-frequency power source that supplies a high-frequency power for drawing ions to the support electrode; wherein the first high-frequency power source supplies a high-frequency power of a frequency of 40 MHz or above; the second high-frequency power source supplies a high-frequency power of a frequency of 500 kHz to 27 MHz, such that an absolute value of the self-bias voltage of the support electrode is 500 V or below; and the process gas supply system supplies a process gas including an ionization accelerating gas that is ionized from a ground state or metastable state with an ionization energy of 10 eV or below and has a maximum ionization cross-section of  $2 \times 10^{-16}$  cm<sup>2</sup> or above, and a molecular gas.

Claim 12 (Withdrawn): The apparatus according to claim 10, wherein a frequency of the high-frequency power supplied by the first high-frequency power source is 100 MHz.

Claim 13 (Withdrawn): The apparatus according to claim 10, wherein a distance between the support electrode and the counter electrode in the parallel plate electrodes is 40 mm or below.

Claim 14 (New): A method of plasma-etching an organic material film formed on a substrate with an inorganic material film used as a mask, by means of a parallel plate type plasma-etching apparatus; wherein the organic material film is plasma-etched with:

a high-frequency power of a frequency of 40 MHz to 150 MHz for generating plasma; and

a process gas including an ionization accelerating gas that is ionized from a ground state or metastable state with an ionization energy of 10 eV or below and has a maximum ionization cross-section of  $2 \times 10^{-16}$  cm<sup>2</sup> or above, and a molecular gas.